

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20221
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION N			
09/955,268	09/18/2001	Michael H. Backman	00AN171 9005			
75	90 01/23/2003					
John M. Miller, Esq.			EXAMINER			
Rockwell International			JONES, JUDSON			
Firstar Center 777 East Wisconsin Avenue Milwaukee, WI 53202			<u> </u>			
			ART UNIT	PAPER NUMBER		
			2834			
			DATE MAIL ED: 01/23/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)	/		
		09/955,268		BACKMAN ET AL.	*		
Office Action Summary		Examiner		Art Unit			
		Judson H Jones		2834			
	The MAILING DATE of this communicatio	n appears on the cover	sheet with the c	orrespondence address			
Period for Reply							
THE II - Exter after - If the - If NO - Failur - Any n	DRTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI sions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by apply received by the Office later than three months after the d patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, howevent, a reply within the statutory minino period will apply and will expire SI statute, cause the application to be	er, may a reply be tim num of thirty (30) days X (6) MONTHS from pecome ABANDONEI	ely filed s will be considered timely. the mailing date of this communic O (35 U.S.C. § 133).	ation.		
1)	Responsive to communication(s) filed or	1,					
2a) <u></u>	This action is FINAL . 2b)	This action is non-fin	al.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
·	Claim(s) 1-27 is/are pending in the applic	cation.					
	4a) Of the above claim(s) is/are wit		tion.				
	Claim(s) is/are allowed.						
6)🖂	Claim(s) 1-26 is/are rejected.						
7)🖂	Claim(s) 27 is/are objected to.						
8)□	Claim(s) are subject to restriction a	and/or election requirem	nent.				
	on Papers						
9) 🗌 -	The specification is objected to by the Exa	miner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
	The oath or declaration is objected to by the	ne Examiner.					
Priority u	inder 35 U.S.C. §§ 119 and 120						
	Acknowledgment is made of a claim for fo	oreign priority under 35	U.S.C. § 119(a)-(d) or (f).			
a)[☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority docu	ments have been received	/ed.				
	2. Certified copies of the priority docu	ments have been receive	ved in Applicati	on No			
* 5	3. Copies of the certified copies of the application from the Internation see the attached detailed Office action for	al Bureau (PCT Rule 1	7.2(a)).	_			
14) 🗀 A	cknowledgment is made of a claim for do	mestic priority under 35	U.S.C. § 119(e	e) (to a provisional appli	cation).		
1) \square The translation of the foreign language Acknowledgment is made of a claim for do						
Attachmen	t(s)						
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449) Paper N	18) 5)		(PTO-413) Paper No(s) Patent Application (PTO-152)	·		
U.S. Patent and T PTO-326 (Re		fice Action Summary		Part of Paper	No. 6		

Art Unit: 2834

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 11-17 and 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. 6,101,952 in view of Mihirogi 5,193,767. Thornton et al. discloses a path for a linear motor comprising a first path portion 48C as shown in figure 9A having a plurality of armature windings, at least two branch path portions 48A, 48B as shown in figure 9A and a routing system as shown in figure 9B operative effective to move a stage between the first path and one of the branch paths but does not disclose the routing system between the first path portion and the branch portions. However Mihirogi teaches in figure 1 a routing system 3 between a first path 1 and branch paths 2b and 2a for the purpose of driving a movable member to alternate destinations. Since Thornton et al. and Mihirogi are both from the same field of

Art Unit: 2834

endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a routing system located between the first path portion and branch portions in order to reduce the number of expensive drive coils on the path and thus reduce the cost of the transport device.

In regard to claims 3-5, 7, 12-14, 16, 22 and 23 see Mihirogi figure 1.

In regard to claims 6, 8, 15, 19, 24 and 25, see Thornton et al. column 10 lines 10-47 which describes an automatic control system for selectively controlling the movement of the movable element. See also Mihirogi column 4 lines 8-31 and column 1 lines 53-56 where a crank means connected to an electric motor is suggested for controlling the movement of the movable element. No teaching in Mihirogi has been found for a "linear motor system operative to selectively move" as recited in claim 6 or a "motor control system being operative to select the selected path portion and control the bridge" as recited in claim 8. However since Thornton et al. teaches automating the control system and since Thornton et al. and Mihirogi are both from the same field of endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized an automatic control system for controlling the bridge portion between a first path and branch paths in order to simplify operation of the device and thus make it more useful and more efficient.

In regard to claims 9, 17 and 26, see Thornton et al. figure 9B and column 10 lines 17-47 which describes a method of selecting the branch a movable member will take based on controlling the armature windings of the path.

In regard to claim 20, according to <u>St. Regis Paper Co. v. Bemis Co., Inc.</u>, 193 USPQ 8, 11 (7th Cir. 1977), duplication of parts for a multiplied effect is not a patentable advance. The

Art Unit: 2834

court stated, "While the addition of multiple plies to the concept of the Poppe bag undoubtedly made it stronger and even may have been necessary to make this type of bag commercially feasible, it is not the type of innovation for which a patent monopoly is to be granted."

Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. as modified by Mihirogi as applied to claims 1 and 11 above, and further in view of Miyazaki et al. 4,849,664 and Nogami 6,285,988. Thornton et al. as modified by Mihirogi discloses the linear motor system but does not disclose the system being used in a building having more than two floors such as occupied by some banks or being used for any other multilevel system. However Nogami teaches that a linear motor can be used to transport articles between different locations in a bank as shown in figure 2 and as described in column 6 lines 30-41. Since Nogami and Thornton et al. as modified by Mihirogi are both from the same field of endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a linear motor having a first path and branch paths with means for switching between the branches as taught by Thornton et al. and Mihirogi for an article conveyance means in a bank because Thornton et al. describes his system as usable for road or track vehicle guidance in column 1 lines 62-67 and mentions structures other than vehicles in column 11 lines 12-13, and also because Nogami provides no details on the linear motor used in his device or details on how the linear motor switches between alternative branches. Thornton et al. as modified by Mihirogi and Nogami discloses a linear motor transport system having a first path and branch path portions for use in a bank but does not disclose a branch path being at a different level relative to the first path portion. However Miyazaki teaches that a linear motor can be used to transport articles between different floors in a bank as shown in figure 9 and as

Art Unit: 2834

Nogami are both from the same field of endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized the switching means of Thornton et al. as modified by Mihirogi and Nogami for switching between two branch paths at different levels because having a transport means switchable between alterative locations at different levels would make the linear motor system usable in more applications and thus make manufacturing such a transport system more profitable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morishita et al. 4,732,087 is cited for disclosing another bridge for making connections between a first path and second or third branch paths.

Allowable Subject Matter

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or teach the combination of controlling armature windings to effect movement of a stage along a selected route combined with moving a bridge portion to position the bridge path between the trunk path and a branch path.

Any inquiry concerning this communication should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the

Art Unit: 2834

Page 6

organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ # 9 January 20, 2003 av Unit 2834